



Indiana State Department of Health

Consensus Statement of the TB Medical Advisory Board

Directly Observed Therapy

What is directly observed therapy (DOT)?

Directly observed therapy means that every dose of antituberculous medication is given to the patient by a trained outreach worker, nurse or other individual who is trained and held accountable for properly administering medication. Your local health department can help you arrange DOT for your patients.

Why is directly observed therapy used?

Nonadherence to therapy is the major cause of treatment failure and the development of drug-resistant tuberculosis (1-3). Patients on DOT are more likely to complete therapy (4-5).

Community-wide use of directly observed therapy for patients with tuberculosis has resulted in declining rates of TB (6), and reduced incidence of drug resistant TB in the U.S. (7).

When should DOT be started?

Ideally, DOT is started when suspected TB is diagnosed. DOT plans should be part of the discharge orders from the hospital. In outpatient situations, it is started with the first prescription. The patient is likely to be much more accepting of DOT, if initiation of DOT is not delayed. Physicians and health department case managers should encourage cooperation with the DOT outreach workers.

But I know that my patients are adherent – why should I use directly observed therapy for people who are already taking their pills?

Actually, physicians are not very good at predicting whether their patients will take medication. In one study, physicians were able to correctly identify only 35% of nonadherent patient's (8). Review of a New York City cohort did not identify any objective risk factors (e.g., homelessness, drug abuse) in almost 40% of patients who defaulted on treatment for two months or more (9).

Patients are not always truthful about medication intake. Electronic monitoring of inhaled medication, for example, has documented a substantial discrepancy between actual medication use and use reported by the patient. (10-11). Electronic monitoring of pill bottles gave similar results (12).

But my patients won't like directly observed therapy.

In fact, most patients are very satisfied with DOT. Clinicians who are experienced with DOT present directly observed therapy confidently to their patients as the standard of care. Directly observed therapy can be performed in the workplace, at home, at the doctor's office, or at any mutually agreed upon location. Your local health department is there to help you arrange DOT.

Who is a candidate for DOT?

DOT is the standard of care in Indiana, and does not require a physician's order for implementation. This means all tuberculosis patients in Indiana should receive all doses of antituberculosis therapy under direct observation.

In a household where a tuberculosis patient is receiving DOT, child contacts should receive preventive therapy under direct observation.

When circumstances are relatively complex, whether due to limited financial resources, lack of adherence to DOT, or complex medical issues; individual consultation with ISDH and/or the ISDH TB Medical Advisory Board is indicated.

References:

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The Indiana State Department of Health Tuberculosis Program adopted this consensus statement in January, 1999. This statement updates the previous Directly Observed Therapy statement from the TB Medical Advisory Board.